

How does a Legislator recognize Sound Science?

[illegible]

Recognized Characteristics of Sound Science

- A credible source. Specifically qualified personnel.
- The use of documented methodologies which produce verifiable results and conclusions.
- Careful statements of causality. It's often important to distinguish correlation from cause.
- Clear measures of confidence - How reliable is the data?
- Peer review and publication.

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Warning Flags for Junk Science - 1

- Observer bias and vested interest
- Important variables overlooked or ignored
- Inadequate sample size and biased sample collection
- Conclusions based on personal stories or anecdotal evidence

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Warning Flags for Junk Science - 2

- Correlation confused with cause and effect
- Statements of certainty
- Lack of helpful standards of reference
- Lack of peer review or publication

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Risk Management Questions

- Who bears the risk and who claims the benefits?
- Who is responsible for resolving the situation and paying for it?
- Is the proposed solution feasible?
- What are the possible repercussions of delaying action?

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Public Perception of Risk - Risks Acceptable to the Public

- Equitable - some effect on everyone in the community (like global warming)
- Chronic (low level radon or cold viruses)
- Self-controlled (driving, sports)
- Personal benefits (job hazards)
- Voluntary (smoking)
- Familiar (household or automotive products)

Public Perception of Risk -

Less Acceptable Risks

- Unfair (waste sites in certain communities)
- Catastrophic (nuclear power plants)
- Controlled by others (waste transport)
- No direct person benefits (factories)
- Involuntary (air pollution)
- Man-made (chemicals)
- Unfamiliar (new technologies)
